

## SURVEY METHODS

The California Department of Food and Agriculture partners with the Pacific Regional Office of the USDA's National Agricultural Statistics Service (NASS) to conduct an annual acreage survey of California grape growers. The purpose of this survey is to provide annual grape acreage with information on new plantings and removals. It is a continuation of a long series of industry-funded grape acreage surveys.

This report consists of two parts:

- Estimated grape acreage -- bearing, non-bearing, and total.
- Detailed data by variety, and year planted -- as voluntarily reported by grape growers and maintained in our database.

With perfect information, the estimated grape acreage and the detailed data would be the same. However, this will never be the case for the following reasons:

- A voluntary survey of approximately 8,500 grape growers is unlikely to ever attain 100 percent completeness.
- It is difficult to detect growers who are planting grapes for the first time.
- The detailed data reflects vine removals from about 7,000 acres during the past twelve months. Of this number, significant acreage was harvested in 2013 prior to being pulled out. As a result, harvested acreage removed in 2013 is included in the estimated acreage, but excluded from the detailed data.

## PROCEDURES

The major source of the grape detailed data was a questionnaire mailed to all grape growers from our database. The mailing was made in late November 2013 to approximately 8,500 grape growers. The questionnaire contained previously reported crop, variety, and acreage information preprinted. Producers were asked to update the information with new plantings, removals, and any other corrections; new growers were mailed a blank questionnaire. Growers were given six weeks to respond by mail. A telephone follow-up was then undertaken. Field personnel personally visited large growers who did not respond by mail.

To arrive at the estimated grape acreage, the grape acreage data base was compared with data provided from the pesticide application data maintained by County Agricultural Commissioners and the Department of Pesticide Regulation.

## DATA CLARIFICATIONS

Bearing and Non-bearing Acreage: For purposes of this publication, all varieties are considered non-bearing for three years ( i.e., acres planted in 2010 would not be bearing until 2013). The only exceptions are the Thompson Seedless variety and all table type grapes in Imperial and Riverside counties, which are of bearing age after one year.

Grafting: Graftings on bearing acres are recorded as planted in the previous year ( i.e., Chardonnay grafted in 2009 onto a 1982 variety is recorded as planted in 2008). This assumes that grafted vines will actually bear a full crop in two years as opposed to three years for a newly planted vine.

Varieties: Data are provided for each variety with 50 or more total acres standing in 2013. Acreage for all other varieties are combined in "Other" categories. Care was taken to properly identify each block reported with a recognized varietal name.

Rootstock: Most of the rootstock shown was planted in the past three years. However, some earlier plantings are included. When rootstock was budded over, the year of planting assigned to that block of grapes was the year preceding the budding. For instance, if a 2008 rootstock planting was budded over in 2010, the year of planting assigned to the selected variety was 2009. (See Grafting.) Nursery rootstock is not included.

Period Covered: The primary intent of the 2013 survey was to record removals of grapes since the 2012 harvest and new planting of grapes during 2013. Acreage abandoned in 2013 was excluded from bearing acreage. Planting activity is accounted for on a calendar-year basis.

Grape Crush Districts: Grape acreage data is also published by grape crush districts (Table 12). A map with descriptions of those districts is located on the inside front cover.

## RESULTS

California's 2013 grape acreage totaled 878,000 acres. Of the total grape acreage, 820,000 were bearing while 58,000 were non-bearing. The wine-type grape acreage is estimated at 570,000 acres. Of the total acres, 525,000 were bearing and 45,000 were non-bearing. Table-type grape acreage totaled 105,000 acres with 95,000 bearing and 10,000 non-bearing. Acreage of raisin-type grapes totaled 203,000 acres, of which 200,000 were bearing and 3,000 were non-bearing.

The leading wine-type varieties continued to be Chardonnay and Cabernet Sauvignon. Flame Seedless was the leading table-type grape variety. Thompson Seedless continued to be the leading raisin-type variety and was utilized for raisins, fresh market, concentrate, and wine.

ESTIMATED GRAPE ACREAGE 1/				
Type	2011	2012	2013	Percent Change
<b>Raisin</b>	209,000	203,000	203,000	(NC)
<b>Bearing</b>	205,000	200,000	200,000	(NC)
<b>Non-Bearing</b>	4,000	3,000	3,000	(NC)
<b>Table</b>	96,000	98,000	105,000	7.1
<b>Bearing</b>	85,000	85,000	95,000	11.8
<b>Non-Bearing</b>	11,000	13,000	10,000	-23.1
<b>Wine</b>	543,000	546,000	570,000	4.4
<b>Bearing</b>	506,000	508,000	525,000	3.3
<b>Non-Bearing</b>	37,000	38,000	45,000	18.4
<b>All Grapes</b>	848,000	847,000	878,000	3.7
<b>Bearing</b>	796,000	793,000	820,000	3.4
<b>Non-Bearing</b>	52,000	54,000	58,000	7.4

1/ Reported data with an allowance for incompleteness. (NC) No Change.

GRAPE BEARING ACREAGE STANDING BY MAJOR VARIETY AND TYPE 1/										
Variety and Type	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fiesta	8,781	9,323	10,697	10,805	12,200	12,261	12,374	12,555	12,554	12,461
Thompson Seedless	227,463	220,823	212,723	204,380	196,906	189,789	184,372	178,673	174,558	173,017
Other Raisin	2,741	3,121	3,244	4,147	4,679	5,138	5,727	5,963	6,673	6,876
<b>TOTAL RAISIN</b>	<b>238,985</b>	<b>233,267</b>	<b>226,664</b>	<b>219,332</b>	<b>213,785</b>	<b>207,188</b>	<b>202,473</b>	<b>197,191</b>	<b>193,785</b>	<b>192,354</b>
Autumn Royal	2,225	3,178	3,729	3,942	3,912	4,227	4,257	4,342	4,275	4,312
Crimson Seedless *	13,162	14,286	14,776	15,191	15,247	14,828	14,623	12,954	13,080	12,367
Flame Seedless *	22,478	22,083	20,573	20,001	19,943	19,488	18,616	18,200	18,449	17,969
Perlette	3,025	2,774	2,548	2,466	2,213	1,795	1,559	1,509	1,405	1,024
Princess *	1,542	1,686	1,778	2,080	2,319	3,183	3,206	3,250	3,307	3,355
Red Globe *	13,064	12,749	12,905	12,195	11,331	11,386	11,430	10,959	10,775	10,692
Ruby Seedless *	4,794	4,312	4,104	4,026	3,826	3,591	3,289	2,866	2,529	2,395
Sugraone	3,075	3,012	3,017	3,001	4,135	4,847	4,622	4,748	4,866	5,686
Other Table	14,212	13,353	13,549	13,423	14,087	15,234	17,465	19,096	21,236	26,333
<b>TOTAL TABLE</b>	<b>77,577</b>	<b>77,433</b>	<b>76,979</b>	<b>76,325</b>	<b>77,013</b>	<b>78,577</b>	<b>79,067</b>	<b>77,923</b>	<b>79,922</b>	<b>84,133</b>
Chardonnay *	93,431	92,089	92,091	91,348	91,522	90,434	91,625	92,791	93,153	94,854
Chenin Blanc	11,242	10,618	10,297	9,489	8,173	7,628	7,213	6,771	5,936	5,820
French Colombard	28,654	27,202	25,770	26,592	25,965	24,772	24,618	23,689	21,020	20,666
Pinot Gris *	4,076	5,094	6,719	7,365	8,003	8,676	10,671	12,529	12,473	13,196
Sauvignon Blanc	13,030	14,082	14,416	14,378	14,372	14,670	15,008	15,248	14,911	15,103
Other White Wine	19,465	20,036	20,258	21,217	21,732	23,395	24,491	24,789	25,212	26,660
<b>TOTAL WHITE WINE</b>	<b>169,898</b>	<b>169,121</b>	<b>169,551</b>	<b>170,389</b>	<b>169,767</b>	<b>169,573</b>	<b>173,626</b>	<b>175,815</b>	<b>172,705</b>	<b>176,299</b>
Barbera	8,470	7,953	7,581	7,441	7,101	6,872	6,812	6,621	6,286	6,000
Cabernet Sauvignon	71,536	74,970	75,909	74,643	73,470	73,797	74,899	75,804	76,691	79,805
Carignane	4,502	3,982	4,157	4,098	3,672	3,559	3,342	3,291	2,547	2,634
Grenache *	7,576	6,801	6,598	6,431	6,761	6,332	6,011	6,213	5,846	5,936
Merlot	51,075	52,185	51,570	48,648	46,693	45,871	46,305	44,849	45,260	44,535
Petite Sirah	4,137	4,594	5,402	5,923	6,584	7,073	7,545	7,756	7,957	8,438
Pinot Noir	22,645	23,323	24,188	24,427	25,737	30,339	33,343	36,988	38,049	38,999
Rubired *	11,092	10,801	10,434	10,387	10,882	11,257	11,051	10,604	10,903	11,923
Ruby Cabernet	6,679	6,527	6,593	6,027	6,033	5,965	5,720	5,861	5,801	5,764
Syrah *	16,335	17,481	17,918	18,085	18,318	18,890	19,085	18,825	18,620	18,791
Zinfandel	48,743	48,969	49,697	49,061	48,787	48,807	48,435	47,869	46,857	47,624
Other Red Wine	17,608	18,434	18,405	19,912	19,886	20,624	20,742	21,530	21,665	22,314
<b>TOTAL RED WINE</b>	<b>270,398</b>	<b>276,020</b>	<b>278,452</b>	<b>275,083</b>	<b>273,924</b>	<b>279,385</b>	<b>283,290</b>	<b>286,208</b>	<b>286,482</b>	<b>292,763</b>
<b>TOTAL WINE</b>	<b>440,296</b>	<b>445,141</b>	<b>448,003</b>	<b>445,472</b>	<b>443,690</b>	<b>448,957</b>	<b>456,916</b>	<b>462,023</b>	<b>459,187</b>	<b>469,062</b>
<b>ALL GRAPES</b>	<b>756,858</b>	<b>755,841</b>	<b>751,646</b>	<b>741,128</b>	<b>734,489</b>	<b>734,723</b>	<b>738,456</b>	<b>737,137</b>	<b>732,894</b>	<b>745,548</b>

\* Synonyms for variety names are shown on Page 3. (NA) Not Available.

1/ Detailed data as voluntarily reported by grape growers and maintained in the database. Totals may not add due to rounding.

**ESTIMATED WINE-TYPE GRAPE BEARING ACREAGE BY VARIETY 1/**

Variety and Type	2011	2012	2013	Percent Change
Cabernet Sauvignon	83,100	83,900	86,000	2.5
Chardonnay	101,700	101,900	104,000	2.1
Chenin Blanc	7,400	6,800	6,700	-1.5
French Colombard	25,900	24,000	23,600	-1.7
Merlot	49,100	50,000	49,300	-1.4
Pinot Noir	40,500	42,000	43,300	3.1
Rubired*	11,600	13,500	15,500	14.8
Sauvignon Blanc	16,700	16,500	16,900	2.4
Syrah	20,600	20,500	21,000	2.4
Zinfandel	52,400	51,800	54,000	4.3
Other Wine	97,000	97,100	104,700	7.8
Total Wine	506,000	508,000	525,000	3.4

\* Synonyms for variety names are shown below.

1/ Reported data with an estimated allowance for incompleteness.

## ACKNOWLEDGMENTS

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<http://www.nass.usda.gov/ca>.

### Grape Variety Synonyms

Alicante Bouschet \*-Alicante  
Beauty Seedless \*-Black Beauty  
Black Corinth \*-Zante Currant  
Black Prince \*-Rose of Peru  
Blaufrankisch \*-Lemberger  
Burger \*-Monbadon  
Chardonnay \*-Pinot Chardonnay,  
Chardonnay Musque  
Cinsaut \*-Black Malvoisie, Black  
Malvasia  
Crimson Seedless \*-Red Crimson  
Emerald Seedless \*-Black Seedless  
Flame Seedless \*-Red Flame  
Gamay (Napa) \*-Gamay, Valdiguie  
Gray Riesling \*-Trousseau Gris  
Grenache \*-Grenache Noir

Italia \*-Muscat Italia  
Malaga \*-White Malaga  
Marechal Foch \*-Foch  
Mataro \*-Mourvedre  
Meunier \*-Pinot Meunier  
Moscato Gaillo \*-Muscat Yellow  
Muscat Blanc \*-Muscat Canelli,  
Muscat Blanc A Petits Grains  
Muscat Hamburg \*-Black Muscat  
Negrette \*-Pinot St. George  
Nero D'Avola \*-Calabrese  
Olivette Blanche \*-Lady Finger  
Palomino \*-Golden Chasselas  
Pinot Gris \*-Pinot Grigio  
Portugieser Blauer \*-Blue Portugues  
Princess \*-Melissa  
Red Globe \*-Rose Ito

Refosco \*-Mondeuse  
Ribolla Gialla \*-Rebolla  
Rubired \*-Tintoria  
Ruby Seedless \*-King Ruby  
Sangiovese \*-Sangiovese, Brunello  
Sauvignon Vert \*-Muscadelle  
St. Emilion \*-Ugni Blanc, Trebbiano  
Syrah \*-French Syrah, Shiraz, Syrah Noir  
Tempranillo \*-Tinta Roriz, Valdepenas  
Touriga Nacional \*-Touriga  
Trousseau \*-Bastardo  
Vermentino \*-Vernantino  
White Riesling \*-Johannisberg Riesling,  
Riesling

\* indicates the published name includes more than one variety name